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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/064,774

08/15/2002

Andrew L. Kurkjian

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03/02/2004

SCHLUMBERGER OILFIELD SERVICES  
200 GILLINGHAM LANE  
MD 200-9  
SUGAR LAND, TX 77478

EXAMINER

SAINT SURIN, JACQUES M

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                   |                                 |            |
|------------------------------|-----------------------------------|---------------------------------|------------|
| <b>Office Action Summary</b> | Application No.<br>10/064,774     | Applicant(s)<br>KURKJIAN ET AL. |            |
|                              | Examiner<br>Jacques M Saint-Surin | Art Unit<br>2856                | <i>psd</i> |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. This Office action is responsive to the amendment of 11/06/03.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC 103***

3. Claims 1, 2, 8, 9, 10, 11, 12, 13, 14, 16, 22, 23, 24, 25, 26, 27, 28, 30, 32, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48 and 59 are rejected under 35 U.S.C. 5 103 (a) as being unpatentable over Meister et al, hereinafter Meister in view of Purfurst (US Patent 4,745,802).

Regarding claims 1, 16, 30 and 45-47, in Figs. 1 and 3, Meister teaches a tool for measuring down hole pressures with a pressure equalizing system comprising: a piston cylinder 308 that contains drilling mud 326, in one configuration, operating a draw piston 236 hydraulic reservoirs are preferably balanced to hydrostatic pressure of the annulus for consistent operation. In Fig 5, formation 30 and 45-47; in FIGS 1 and 3, fluid, 502, is balanced by mud pressure in 328, and pressure measured by sensor 320. However, Meister does not specifically disclose or suggest selectively equalizing an internal pressure of the apparatus. Purfurst discloses the external mud is at a pressure represented by the symbol H, this pressure being introduced by the external port to equalize across the snorkel and seal pad 32 to avoid sticking of the formation tester 10, see: col. 4, lines 49-52. It would have been obvious to one having ordinary skill in the art at the time of the invention to employ in Meister the selective equalizer 61 of Purfurst because it would provide an equalizing valve 61 which selectively opens the external port, to connect the port to the sample line 60 thereby

achieving the balancing pressure in the annular and pore pressures in an efficient manner.

Regarding Claims 2, 48 and 59; the first passage is 246, the second passage is 316 and/or 326, and the pistons comprise a valve arrangement (see Meister).

Regarding Claims 8, 22, and 37; depending upon definition, chambers 324 and 322 constitute variable volume pressure and buffer chambers (see Meister).

Regarding Claims 9, 23 and 38: see Meister, ¶ 41.

Regarding Claim 10, 24, 39 and 42; there are two sliding pistons, and 222, and open and closed are defined with respect to ports 312, ports 328 (see Meister).

Regarding Claims 11-12, gauge is in contact with annulus 228, filled with formation fluid and registers formation pressure which is also annulus pressure (see Meister).

Regarding Claims 14, 28 and 44; see check valve 602 in Fig 5 of Meister.

Regarding claims 2, 32, 48 and 59; the first passage is 246, the second passage is 316 and/or 326, and the pistons comprise a valve arrangement (see Meister)

Regarding claims 8, 22, and 37; depending upon definition, chambers 324 and 322 constitute variable volume pressure and buffer chambers (see Meister).

Regarding claims 9, 23 and 38: see Meister, Regarding Claim 10, 13, 24, 27, 39 and 42; there are two sliding pistons, 236, and 222, and open and closed are defined with respect to ports 312, ports 328 (see Meister).

Regarding Claim 10, 13, 24, 27, 39 and 42; there are two sliding pistons, 236, and 222, and open and closed are defined with respect to ports 312, 314, and two ports 328 (see Meister).

Regarding claims 11-12, 25-26 and 40-41; in Fig 8, gauge is in contact with annulus 228, filled with formation fluid and registers formation pressure which is also annulus pressure (see Meister).

Regarding claims 14, 28 and 44, see check valve 602 in Fig. 5 of Meister.

Regarding Claim 15, 29 and 58, Meister teaches a spring, but does teach two reservoirs, and 324 one which acts as a spring against the other. It would have been obvious to one of ordinary skill in the art the time the invention to provide springs instead two reservoir arrangement as these are equivalent.

Regarding Claims 50-51, 56 and open and closed are a matter of definition. Meister obviously measures while the moving or not moving, see ¶ 15.

Regarding Claim 52; in Fig 8, the gauge is in contact with annulus 228, filled with registers formation pressure which is also annulus pressure (see Meister)

Regarding Claims 53, 55-57 and 62-65; see Fig 2, and pressure sensor 320.

Regarding Claim 54; Meister fails to teach scraping but does teach repeated flushing. It would have been obvious to one of ordinary skill of the invention to scrape, flush, or penetrate the mud-cake as these are all equivalent steps.

4. Claims 3-7, 17-21, 32-36, 49 and 60 are rejected under 35U.S.C. 103 (a) as being unpatentable over Meister in view of Purfurst (US Patent 4,745,802) and further in view of Hancock et al, hereinafter Hancock.

Regarding Claims 3-5, 17-19, 32-34, 49 and 607 Meister in view of Purfurst fails to teach a filter but does acknowledge that Hancock uses a wherein the placement is obvious. It would have been obvious to one of ordinary skill in the art at the time of the

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invention to employ a Hancock filter to prevent clogging in Meister as this is a recognized problem.

Regarding Claims 6, 20 and 36; Meister teaches a probe extendable from an attachment to the BHA.

Regarding Claims 7, 21 and 35: Meister in view of Purfurst fails to teach a wear band, stabilizer, or under reamer. It would have been obvious to one of ordinary skill in the art at the time of the invention to mount the invention in any convenient location and Meister's location is equivalent to mounting on wear band, stabilizer, under reamer.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-65 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M Saint-Surin whose telephone number is (571) 272-2206. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jacques M. Saint-Surin  
February 09, 2004



HEZRON WILLIAMS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800